

REMARKS

Claims 1 - 10 were previously pending. Claims 11 - 17 are herein added. Accordingly, claims 1 - 17 are presently pending in the application.

Applicant's invention relates an image processing apparatus for use with, for example, stimuable phosphor sheets which emit light in proportion to an amount of stored energy. An embodiment of the invention includes the emitted light being read by a reader unit controlled by a dedicated controller, and wherein the dedicated controller also sends corrective data (*e.g.*, signal De as shown in Fig. 4) to another controller.

Procedural Rejections

Claims 3 and 4 stand rejected under 35 U.S.C. § 112, 2nd paragraph, for allegedly failing to particularly point out and claim the subject matter which the applicant regards as the invention. To traverse this rejection, claim 3 has been amended to change the phrase "error in" to --error during--, as shown in the Listing of Claims.

Claim Rejection Under 35 U.S.C. § 102

The Examiner alleges that claims 1 - 7 & 9 - 10 are anticipated under 35 U.S.C. § 102 in view of U.S.P. No. 4,985,629 ("Horikawa"). This rejection is respectfully traversed as follows.

Horikawa relates a shading elimination method for an image read-out apparatus. As part of Horikawa's method, a signal, "T," is synchronized to the scanning of a laser beam so that correction values are output when image information (stored in memory) is read (*see* Col. 6, lines 5 - 11).

Independent Claim 1

Applicant's independent claim 1 recites (among other things) "a controller dedicated for controlling reading of the image from the . . . recording medium . . . [and] . . . being operable in synchronism with a main scanning synchronizing signal supplied thereto." At least these features of independent claim 1 are altogether absent in the Horikawa reference.

Indeed, while the Examiner cites to the Abstract and Fig. 1 of the Horikawa reference as allegedly disclosing the above-referenced features of independent claim 1, it is respectfully asserted that the above-cites do not disclose or suggest a controller by which the various parts of a method are controlled, let alone a controller by which reading elements are controlled. What is more, the entirety of the Horikawa reference is likewise deficient.

By way of explanation, Horikawa's Fig. 1 merely shows steps in a method wherein light is emitted from a stimuable phosphor sheet 1, and the emitted light is then guided by a light guide 5 to a photomultiplier 6 (*see* Col. 3, line 44, to Col. 4, line 15). The photomultiplier 6 generates an analog output signal S, which is amplified by a logarithmic amplifier 7. *Id.* Furthermore, the Abstract is merely a high-level view of the Horikawa method and absolutely fails to teach or suggest the above-noted features of independent claim 1. Succinctly stated, Horikawa is entirely deficient in teaching or suggesting a dedicated controller.

Additionally, while Horikawa does relate a synchronization signal, "T," this signal is merely used to synchronize correction values to the scanning of a laser beam so that correction values (stored in memory) are output when image information is read (*see* Col. 6, lines 5 - 11). In short, there fails to be the same relationship in Horikawa's synchronization signal as that found in Applicant's independent claim 1 between a synchronizing signal and a dedicated

controller. That is, Horikawa's synchronization merely relates to a memory read out operation which may be performed by a *shared* controller. The teaching of a controller *dedicated* for reading, as recited in Applicant's independent claim 1, is neither explicit nor inherent in the Horikawa reference's *shared* controller. To the extent that no dedicated controller is disclosed by Horikawa, the reference would include the added expense of dedicated external memory, synchronization, and counters of known devices.

What is more, Horikawa's synchronization signal merely synchs the output of correction values to the scanning of a laser beam. In contradistinction, Applicant's dedicated controller (*e.g.*, the second CPU) is operable in synchronism with a synchronization signal (*e.g.*, horizontal scanning signal, Se). In light of the previous, it is asserted that the Horikawa reference is entirely deficient. Accordingly, it is respectfully requested that the Examiner reconsider and withdraw this rejection.

Moreover, if the Examiner believes a dedicated controller that is operable in synchronism with a main scanning synchronization signal is somehow inherent in the prior art, then further documentary evidence, such as prior art that discloses these features or an affidavit from the Examiner, is respectfully required as provided by M.P.E.P. § 2143.03(C).

Dependent Claims 2 - 10 and Newly Dependent Claims 11 - 17

Further as to dependent claims 2 - 17, these claims depend either directly or indirectly upon claim 1, and are therefore patentable by virtue of their dependency at least for the same reasons finding claim 1 patentable.

Additionally in relation to claims 2 - 4, these claims are allegedly rejected in view of Horikawa's Fig. 1 and/or the Abstract. Clearly, however, the recitations of claims 2 - 4 are not so disclosed. For instance, claim 2 recites the controller comprising means for performing shading correction on the image to be read in at least an effective reading period in a period of reading one line of image. Succinctly, these limitations are nowhere to be found in Horikawa.

Further, the Examiner compares Horikawa's Abstract to Applicant's claim 3 which recites means for detecting at least an error in an ineffective reading period in a period of reading one line of image (in other words, means for detecting fluctuations in the error of a reading unit). This comparison is inapposite, as explained below.

The fluctuations disclosed in Horikawa relate to unevenness in the images before shading correction. Therefore, Horikawa's fluctuations do not relate to the error of a reading unit, as in Applicant's independent claim 3. Additionally, to the extent that the Examiner relies on fluctuation detection, such occurs in Horikawa during an effective reading period, not an ineffective reading period (as recited by Applicant's claim 3), and Horikawa does not detect an error, but merely supplies an *a priori* correction value. Consequently, the Examiner is respectfully requested to reconsider and withdraw this rejection as the Horikawa reference is absolutely deficient for at least these additional reasons.

The features of claims 4 and 10 are also similarly absent from the Horikawa reference. That is, Horikawa absolutely fails to teach or suggest the concept of synchronized detection. Accordingly, due to these additional reasons, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim 5 is alleged by the Examiner to be disclosed by Col. 6, lines 46 - 49. This citation, however, merely discusses an erasing light source, and does not discuss “means for detecting an erasing level. . .” Indeed, nowhere in Horikawa is there disclosure of at least this feature of claim 5. In light of this, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim 6 is alleged by the Examiner to be disclosed by Col. 4, lines 6 - 9. Horikawa, however (including Col. 4, lines 6 - 9), does not teach or suggest “including means for holding a maximum value of the level of an image signal from the line to be read.” Consequently, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Claim Rejection Under 35 U.S.C. § 103

Additionally as to claim 8, this claim is rejected under 35 U.S.C. § 103. Claim 8 depends from claim 1, and claim 1 is not rejected under 35 U.S.C. § 103. M.P.E.P. § 2143.03 controls this issue with the following rule: “[i]f an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.” Accordingly, claim 8 is patentable at least because independent claim 1 is not rejected under § 103.

Conclusion

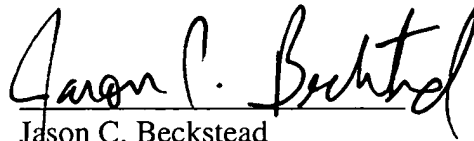
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

U.S. APPLICATION No. 09/988,373
Amendment Under 37 C.F.R. § 1.111

Attorney Docket No. Q66793

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